

BEEF SYSTEMS

The beef industry in the Upper Midwest and northern Great Plains states is characterized by cow-calf production and by 'farmer-feeder' operations. There are no large-scale slaughter facilities available and market-ready feedlot cattle are shipped between 300 - 700 miles to slaughter plants adding transportation costs to the producer.

Approximately 90 percent of feeder cattle born in the region are shipped out of the region for finishing. This represents a loss in economic opportunity that could be gained by adding value to the cattle and using grain produced in the region.

If North Dakota processed 500,000 head of beef cattle annually (about 56% of its production) the direct additional contribution to the economy would be \$300 million. The additional per head revenue available to ranchers and the employment opportunities created with small processing operations could revitalize a number of struggling rural communities.

Objective:

The principal objective of the Center of Excellence in Beef Systems is to provide leadership, scientific, and business expertise to develop a coordinated beef processing industry in North Dakota.

Purpose:

- Create a model to develop a coordinated meat processing industry that could be implemented in other parts of the state, region or country.
- Enhance NDSU's ability to provide leading research in:
 - a) the effects of genetics, management, and nutrition regimens on carcass merit, quality and sensory characteristics,
 - b) food safety and nutrition of resulting meat products
 - c) evaluate new and emerging technologies in slaughter, fabrication, further processing, and value added meat products,
 - d) provide data on meat and meat marketing.
- Provide training, educational and outreach opportunities.

Progress and accomplishments:

- Raised \$500,000 in private funds and \$1 million in federal funds to match \$800,000 appropriated in 2003 - 2005 biennium.
- Feasibility analysis indicates that there are two major barriers to profitability in small processing facilities.
 1. Identification of a market for the beef products produced which has potential for market premiums, and
 2. Garnering value of offal (byproducts)
- A survey of the state's slaughter facilities indicates most garner little or no value from offal. In fact, many pay to landfill the material at a substantial cost. The center continues to explore ways for smaller processors to add value to byproducts.
- A year-round supply of fed cattle is critical to the success of any beef cattle slaughter facility. Data gathered by our research team indicates growth in the state's feedlot capacity. There is ample supply of fed cattle in the region to support the scale of facility proposed by the Center.

Requirements:

- An additional \$500,000 needs to be raised to meet matching requirements.
- A business partner who meets the following criteria:
 1. Experience operating small beef cattle packing facilities efficiently and cost effectively,
 2. Brand equity and an existing label in a major beef market.

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